

REMARKS

In the September 26, 2005 Office Action, the Examiner noted that claims 2-4, 7-9, 12-14, 17-19 and 21-32 were pending and were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent 5,537,574 to Elko et al. Claims 2-4, 7-9, 12-14, 17-19, and 21-32 are pending and under consideration. The Examiner's rejections are respectfully traversed below.

Interview Summary

Applicants' acknowledge with appreciation the telephone interview granted by the Examiner which was held on January 24, 2006. During the interview, the Examiner explained that on review of the Office Action, the CPC-1 and CPC-M illustrated in FIG. 1 and described at column 5, lines 43-47 of Elko were not fully representative of what actually shows Applicant's invention and that these portions of Elko were cited as a general overview of what suggested the invention. Then the Examiner asserted that in addition to what was cited in the Office Action, that column 8, lines 1-45 and column 5, line 61 in Elko were more representative of showing "block allocation to record a file".

The Examiner further asserted that the DASD Director in FIG. 1 and column 5, lines 48-53 of Elko which refers to DB2 and IMS programs, suggested production of "management information indicating the blocks that have been allocated" (claim 29, lines 3-4).

Finally, the Examiner explained that on review of the Office Action, the shared electronic storage (SES) cache 101 illustrated in FIG. 1 of Elko was not fully representative of what actually shows Applicant's invention and that this was offered as a general overview of what suggested the invention. Then the Examiner asserted that in addition to what was cited in the Office Action, column 6, line 36; FIG. 30; column 49, lines 24-30; column 51, lines 14-19; and column 50 in general show a storage controller for recording the file management information and sequence information indicating a sequence in which the file was recorded in the blocks.

As discussed at the Examiner Interview and more fully below, it is submitted that even though the term "sequence" was used in the passages cited above, the above-cited portions of Elko disclose something different than sequence information indicating a sequence in which the file was recorded in the blocks, as recited in the claimed invention.

Rejections under 35 U.S.C. § 102(b)

In the September 26, 2005 Office Action, claims 2-4, 7-9, 12-14, 17-19, and 21-32 were rejected under 35 U.S.C. § 102(b) as anticipated by Elko.

Independent claim 29 as amended recites in part: "block allocation means for allocating blocks in the external storage device to record a file accessed by said file device" (claim 29, lines 3-4), as described in the specification at least at page 13, lines 8-21, as shown in FIG. 3 and page 14, lines 7-11, as shown in FIG. 5. In the disclosed embodiment, the external storage device 102, which is external to the host processor, has blocks allocated to store a file.

In contrast, what was cited in the Office Action was CPC-1 through CPC-M in FIG. 1 of Elko which are described as "central processing complexes (CPCs) having local buffers" (column 2, lines 17-20), where there are (Local Cache Buffers) "LCBs allocated in the CPC's MS/ES" (column 5, lines 43-47). The configuration of these components are packaged together in an integrated circuit, where "[e]ach CPC is of the type shown in FIG. 2, which may be a multiprocessor" (column 13, lines 4-5). "Each CPC in the sysplex operates with a storage hierarchy, which for example may include a private high-speed, hardware cache in each CPU ... of a CPC, a shared hardware cache ... [including SES], a main storage ... (MS) ... [and] a hardware storage area (HSA)" (column 13, lines 18-24). "Insofar as this invention is concerned, the MS/ES storage combination may be considered as a single random access storage unit internal to the CPC" (column 13, lines 29-31). Thus, nothing was cited or found that teaches or suggests allocating blocks to an external storage device, as recited in claim 29.

In regard to additional citations in Elko offered by the Examiner during the Examiner Interview on January 24, 2006, nothing was found in column 8, lines 1-45 or column 5, line 61 that teaches or suggests allocating blocks to an external storage device.

Claim 29 as amended recites, "management information indicating the blocks that have been allocated" (claim 29, lines 5-6). As described in the specification at least at page 11, lines 30-37; page 12, lines 2-10 and illustrated in FIG. 3, management information stored in the external storage device 102 indicates the blocks that have been allocated. In contrast, what was cited in Elko is a DASD Director shown in FIG. 1, which "controls the data flows between all CPCs in the sysplex and all the DASDs" (column 13, lines 40-48). In other words, the DASD Director merely controls copies of data sent to external storage, but nothing has been cited or found that teaches indicating blocks allocated in an external storage device. The Office Action also, cited "DB2 and IMS" programs which "in a CPC may have their own LCBs allocated in the CPC's MS/ES" (column 5, lines 48-53). As discussed above, "the MS/ES storage combination may be considered as a single random access storage unit internal to the CPC" (column 13, lines 4-31); therefore, this has nothing to do with indicating blocks that have been allocated in an external storage device.

Claim 29 as amended also recites, "storage control means for recording in the blocks in the external storage device the file, after the management information and sequence information indicating a sequence in which the file is to be recorded in the blocks" (claim 29, lines 7-9). As described in the specification at least at page 13, lines 23-37; and page 18, lines 9-32; and shown in FIG. 3, FIG. 4 and FIG. 7A through FIG. 7E, a file is written to the allocated blocks of the external storage device after management information and sequence information is stored in the external storage device. And that management and sequence information indicates the sequence in which the file is to be written into the allocated blocks of the external storage device.

In contrast, what was cited in Elko was block 101 (FIG. 1), described as an "SES cache [that] contains a name of a data element registered in SES by any of its attached CPCs ... this directory name also identifies a copy of the data element stored in ... one of the DASDs" (column 14, lines 28-41). It is also taught that "memory 101 includes management logic 110 ... which manages all memory storage operations" (column 15, lines 33-40). However, these passages of Elko do not describe operating on management information and sequence information as recited in claim 29.

Furthermore, what was cited in Elko assumes "that there are two systems, S1 and S2, which are involved in data sharing. In illustrating the sequence of events in the example, use is made of a representative directory entry 3201" (column 51, lines 14-19). The use of the word "sequence" in this phrase has nothing to do with "a sequence in which the file is to be recorded in the blocks" as recited in claim 29.

In regard to additional passages in Elko offered by the Examiner during the Examiner Interview on January 24, 2006, nothing has been found in column 6 that discloses the limitations recited in claim 29. Column 6 is directed to local cache operation. Column 49, lines 24-30 which refer to FIG. 30, use the word "sequence" in reference to writing an updated page in shared cache. This has nothing to do with the operations on sequence information and management information recited in claim 29. Thus, nothing has been cited or found in Elko that discloses all of the limitations recited in claim 29.

Independent claim 31 recites operations using an "external storage device" in a manner similar to the file device recited in claim 29. Claims 2-4 and 21 depend from claim 29 and claims 12-14 and 23 depend from claim 31. Thus, claims 2-4, 12-14, 21, 23 and 31 distinguish over the applied art for the reasons discussed in regard to claim 29.

Independent claims 25, 30 and 32 recite recording in memory blocks, management information and sequence information "indicating a sequence in which the file was recorded in

the blocks" in a manner similar to claim 29 and as described in the specification at least at page 13, lines 23-37; and page 18, lines 9-32; and shown in FIG. 3, FIG. 4 and FIG. 7A through FIG. 7E. Therefore, claims 25, 30 and 32 distinguish over the applied art for reasons discussed in regard to claim 29. Since claims 7-9, 17-19, 22, 24 and 26-28 depend from claims 25, 30 and 32, these claims also distinguish over the applied art for the reasons discussed in regard to claim 29.

CONCLUSION

It is submitted that the applied reference does not teach or suggest the features of the claimed invention. Thus, it is submitted that claims 2-4, 7-9, 12-14, 17-19 and 21-32 are in condition for allowance.

If there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

Finally, if there are any additional fees associated with filing of this Amendment, please charge same to our Deposit Account No. 19-3935.

Respectfully submitted,

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